

Remarks

Claims 1-6 and 10-25 are pending. Claims 7-9 are canceled and new Claims 22-25 are added in this Response.

Allowable Subject Matter

Claim 17 would be allowable if amended to overcome the Section 112 rejection addressed below and rewritten in independent form including all of the limitations of the base claim. For the reasons detailed below, Applicant feels Claim 17 meets the requirements of Section 112 and that the base claim (Claim 16) is allowable. Therefore, Applicant elects not to amend Claim 17.

Rejections Under 35 U.S.C. § 112

Claims 10, 16, 17, 19 and 21 were rejected under Section 112 as being indefinite. The Office asserts that the recitation of "a combination of movable and stationary sheet separator pads" (Claims 10, 16, 17 and 19) and "a combination of movable and stationary means" (Claim 21) is indefinite.

Applicant respectfully suggests these structural recitations are clear, particularly when read in connection with other limitations in the claims. "A combination of movable and stationary sheet separator pads" clearly requires (1) a combination of elements and (2) that those elements include at least one movable separator pad and at least one stationary separator pad. Fig. 7, for example, shows one such combination -- separator pads 60, 62 and 64 disposed across the media path include a movable separator pad 60 and stationary separator pads 62 and 64. See also, Specification, paragraph 0014. Claim 10 also recites that at least one of the pads is movable to vary the degree to which the pads, in combination, impede the leading edge of sheets fed along the media path. So, not only does the device include at least one movable pad and at least one stationary pad, but the movable pad (or one of the movable pads) must be movable to vary the degree to which the pads in combination impede the trailing edge of the sheets. There does not appear to be anything vague or ambiguous about these claim limitations.

Applicant acknowledges that there are other ways to characterize this same structure. For example, the same structure might be characterized as "a movable sheet separator pad and a stationary sheet separator pad" or "a plurality of sheet separator pads disposed across a sheet media path, at least one of the pads being movable and at least one of the pads being stationary." It is felt, however, that the

original recitation is just as clear and definite as are the alternative characterizations just mentioned. For these reasons, Applicant requests that the Section 112 rejection be withdrawn.

Claims 16, 19 and 21 include identical or similar limitations. For these same reasons, therefore, Claims 16, 19 and 21, and Claim 17 which depends from Claim 16, are also felt to meet the requirements of Section 112.

If the Examiner continues to feel the claim language is indefinite, he is respectfully requested to call the undersigned to discuss amending the claims to include an alternative characterization to address any continuing concern the Examiner may have.

Rejections Under 35 U.S.C. § 102

Claims 1-16 and 18-21 were rejected under Section 102 as being anticipated by Teo (6663098). The Office's remarks in support the Section 102 rejections are set forth below in full.

"Note the movable pad 203,205 movable between a first position in which it impedes a leading edge of sheets fed from the stack and a pair of stationary pads 106 (opposite the elements 101 of the feed roller assembly). See Figure 2. Note also the movable pad 203,205 (first feature of claims 11-15, 18 and 20) is biased toward the first position (see column 5 lines 55-64)."

Applicant respectfully submits that the Office has ignored key limitations in the claims that distinguishes the claimed movable pad from the kicker 203 in Teo.

Claim 1 recites that the movable pad in the first position "impedes a leading edge of sheets fed from the stack along the media path...." The compound kicker 203 in Teo, including the flexible top part 205 and the rigid base part 207, is not designed to nor does it impede the leading edge of sheets *fed from the stack along the media path*. Rather, kicker 203 is rotated out of the way so as not to impede the leading edge of a sheet fed from the stack as can be seen by comparing the position of kicker 203 in Teo Figs. 4A-4C. After a sheet is fed from the stack, kicker 203 rotates up to block the leading edge of next-to-top sheets that may have been pulled in to the separator 105 and to move them back into the stack. This sequence of operation is described in Teo at column 5 as follows.

"In FIG. 4B, as the pick process starts, the pick roller as well as the kicker cam rotates in the counterclockwise direction B in which the pick roller rotates toward the media stack 109 for picking and

advancing the top sheet 111. Before the activating point 406 of the pick roller has reached the top sheet 11 [sic], the compound kicker 203 is activated by the kicker cam 411 and rotates toward **a feed position, in which kicker 203 extends in a direction substantially parallel to the separating surface of the separator.** ...

In FIG. 4C, as the pick roller 101 further rotates in the counterclockwise direction B, the top sheet 11 is advanced into the feed zone 113, followed by the next-to-top sheets. As the next-to-top sheets further move on in the pick process, first several **next-to-top sheets 117 just underneath the top sheet are stopped by the separator.** ... The compound kicker 203 is further pressed down to its feed position by the kicker cam 411 (see FIG. 2) until it is fully depressed in the media path as shown in FIG. 4C.

In FIGS. 2 and 4D, the turning point 405 has just passed the compound kicker 203. The kicker cam 411, which has a profile similar to the pick roller 101, releases the lever 417 on the kick shaft 415, and the kicker 203 starts rotating back to its kicking position due to the biasing force provided by the spring (not shown). Furthermore, rotation of the kicker back to the kicking position will kick the next-to-top sheets back to the input tray 107...." Teo, column 5, lines 29-64 (emphasis added).

It is clear from these passages that the separator 105 in Teo is the only impediment to the leading edge of top sheet 111 as it is fed along the media path. Teo does not teach that kicker 203 impedes the leading edge of top sheet 111 as it is fed along the media path. On the contrary, Teo teaches moving kicker 203 out of the way so that it does not impede the leading edge of top sheet 111 when it is fed along the media path. Assuming for purposes of argument only, and without conceding, that next-to-top sheets 117 might also be deemed "sheets fed along a media path" in Claim 1, the kicker 203 in Teo does not impede the leading edge of the next-to-top sheets 117 while they are being fed along the media path. Kicker 203 remains in the depressed/feeding position until after the pick roller has disengaged top sheet 111. At that point, next-to-top sheets 117 cannot in any way be deemed to be sheets fed along a media path.

Teo, therefore, does not teach all of the limitations of Claim 1. Claims 2-6 are also felt to distinguish patentably over Teo due to their dependence on Claim 1.

Further with regard to Claim 2, which has been amended to recite that a contact surface of each pad comprises the same elastomeric material, kicker 203 in Teo is made from a Mylar™ film and a rigid molded polycarbonate. Neither material

is elastomeric and, in any event, there is no teaching in Teo that separator 105 has a contact surface made of either of these materials. For this additional reason, Claim 2 is felt to distinguish patentably over Teo.

Further with regard to Claim 3, which recites that the sheet supporting surface comprises a substantially vertical surface, Teo teaches a supporting surface that is not substantially vertical. "Substantially vertical" is specially defined in paragraph 0010 of the Specification as within 5 degrees of true vertical. The supporting surface in Teo is 20 degrees off true vertical (as measured with a protractor laid on Fig. 4a). The significance of this distinction is noted in paragraph 0016 of the Specification. For this additional reason, Claim 3 is felt to distinguish patentably over Teo.

Claims 10, 16 and 19 recite movable and stationary sheet separator pads. Teo does not teach a movable sheet separator pad. Separator 105 in Teo is stationary. Kicker 203 in Teo is not a sheet separator pad and the Office makes no specific assertion to the contrary. Teo does not teach all of the limitations of Claims 10, 16 and 19 and the rejection of those claims should, therefore, be withdrawn.

Claims 11, 18 and 20 recite a movable feature configured to separate a top sheet from a next-to-top sheet. Claim 21 recites a movable means for separating a top sheet from a next-to-top sheet. Separator 105 in Teo is stationary. Kicker 203 in Teo is not configured to separate a top sheet from a next-to-top sheet and the Office makes no specific assertion to the contrary. Teo does not teach all of the limitations of Claims 11, 18, 20 and 21 and the rejection of those claims should, therefore, be withdrawn.

Claims 12-15 are felt to distinguish patentably over Teo due to their dependence on Claim 11.

New Claims 22-25

New Claim 22 recites a movable sheet separator pad and a stationary sheet separator pad. For the reasons noted above for Claims 10, 16 and 19, new Claim 22 also distinguishes patentably over Teo.

New Claim 23 recites a movable pad movable between a first position in which the movable pad impedes but does not block a leading edge of the top sheet fed from a stack along the media path and a second position in which the movable pad does not impede the leading edge of the top sheet fed from the stack along the media path. New Claim 23 is similar to Claim 1 but adds that the movable pad

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impedes **but does not block** the leading edge of the top sheet to further distinguish Teo.

New Claim 24 depends from Claim 16 and adds the further limitation that a movable pad is movable between a first position in which the movable pad contacts the pick roller to form a nip between the movable pad and the pick roller and a second position in which the movable pad does not contact the pick roller. Nothing in Teo is even remotely similar to this added limitation.

New Claim 25 depends from Claim 16 and adds a kicker that is discrete from any movable separator pad. The kicker is disposed adjacent to the media path and the kicker is operative at the end of a pick cycle to return sheets to the input tray. If, as the Office asserts, kicker 203 in Teo is a movable separator pad, then it cannot also be a kicker that is discrete from any movable separator as recited in new Claim 25.

Objection To The Specification

The Office objected to the Specification, asserting that there is no antecedent basis in the Specification for the recitation of a first movable feature and a second stationary feature in the claims. Applicant respectfully disagrees.

It is helpful here to recite the full claim elements. Claim 11, for example, recites "a first movable feature downstream from the supporting surface along a media path that extends from the supporting surface to and along the first feature, the first feature configured to separate a top sheet in a stack of sheets supported on the supporting surface from a next-to-top sheet in the stack" and "a second stationary feature spaced apart from the first feature across the media path, the second feature configured to separate a top sheet in the stack from a next-to-top sheet."

Movable pad 60 in the Specification and drawings is one example of such a first feature and stationary pads 62 and 64 are each one example of such a second feature. Applicant requests, therefore, that the Office withdraw the objection to the Specification.

The foregoing is believed to be a complete response to the outstanding Office Action.

Respectfully submitted,



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